

Docket No. 520.43596X00
Serial No. 10/791,823
Office Action dated August 4, 2006

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A liquid cooling system for use in an electronic apparatus including a heat-generating element therein, comprising:

a pump for supplying a cooling liquid;

a heat-receiving jacket, being supplied with said cooling liquid, for receiving heat from the heat-generating element;

a radiator, being supplied with said cooling liquid passing through said heat-receiving jacket, for radiating heat therefrom;

flow passages for circulating said cooling liquid in a route passing through said radiator back to said pump, said flow passages including parts that generate corrosive ions therefrom; and

a tank for accumulating said cooling liquid circulating within said flow passages, wherein:

the cooling liquid contained within said system is less than or equal to one liter in volume.

an ion exchange bag, having water-permeable surfaces, encloses an ion exchange resin therein, and is freely-disposed in the cooling liquid accumulated within said tank, and

said ion exchange bag enables ion exchange through diffusion on almost all water-permeable surfaces thereof.

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2. (Previously Presented) The liquid cooling system, as described in the claim 1,
wherein:

the ion exchange bag, having the water-permeable bag enclosing the ion
exchange resin therein, is held within a container.

3. (Previously Presented) The liquid cooling system, as described in the claim 1,
wherein:

said ion exchange bag is disposed within an inside or a downstream of said
radiator, and also in one of parts building up the liquid cooling system in an upstream
of said heat-receiving jacket.

4. (Previously Presented) The liquid cooling system, as described in the claim 2,
wherein:

said ion exchange bag is disposed within an inside or a downstream of said
radiator, and also in one of parts building up the liquid cooling system in an upstream
of said heat-receiving jacket.

5. (Currently Amended) An electronic apparatus, comprising:

a heat-generation element mounted on a substrate;

a heat-receiving jacket, being thermally connected to said heat-generation
element;

a heat radiation jacket for radiating heat of a heated liquid supplied from said
heat-receiving jacket;

a pump for circulating the liquid to those jackets; and

a piping for connecting said pump and said both jackets, wherein:

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the cooling liquid contained within said system is less than or equal to one liter in volume,

an ion exchange bag, having a water-permeable bag enclosing ion exchange resin therein, is freely-disposed in said piping, and
said ion exchange bag enables ion exchange through diffusion on water-permeable surfaces thereof.

6. (Previously Presented) The liquid cooling system of claim 1, wherein said ion exchange bag is in the form of an exchange holder.

7. (Previously Presented) The liquid cooling system of claim 6, wherein said ion exchange holder is held within a container.

8. (Previously Presented) The liquid cooling system of claim 6, wherein said ion exchange holder is disposed within an inside or a downstream of said radiator, and also in one of parts building up the liquid cooling system in an upstream of said heat-receiving jacket.